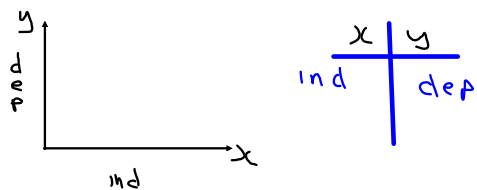


2.4 Connecting Equations and Graphs p. 112-117

To graph a relationship using technology it must first be written as an algebraic equation. Traditionally, x represents the independent variable and y represents the dependent variable



i.e. Emma needs a ride to Evie's house to play a game of pick up basketball. Emma calls Carleton Place Taxi to see how much this ride will cost. The dispatcher explains that it costs \$5 for the taxi to pick her up and \$2 for every km it is to Evie's house. If the distance is 20km, how much will it cost?

Feb 14-8:10 AM

i.e. Emma needs a ride to Evie's house to play a game of pick up basketball. Emma calls Carleton Place Taxi to see how much this ride will cost. The dispatcher explains that it costs \$5 for the taxi to pick her up and \$2 for every km it is to Evie's house. If the distance is 20km, how much will it cost?

Word Equation

$$\text{Cost} = 2 \text{ distance} + 5$$

Algebraic Equation

$$y = 2x + 5$$

Feb 15-9:12 AM

$$y = 2x + 5$$

$$x = 0 \quad y = 2(0) + 5$$

$$y = 5$$

$$x = 5 \quad y = 2(5) + 5$$

$$= 10 + 5$$

$$= 15$$

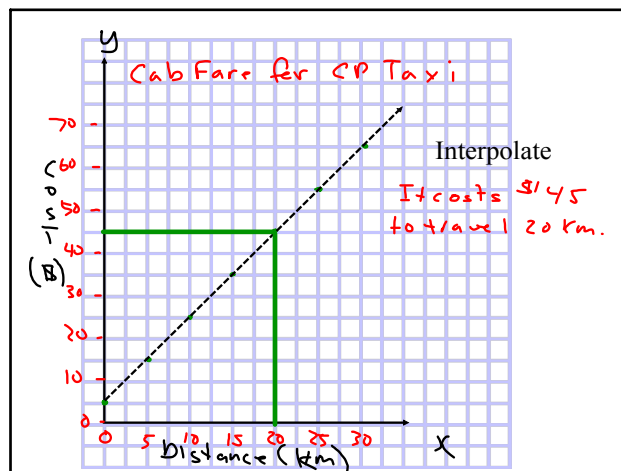
$$x = 10 \quad y = 2(10) + 5$$

$$= 20 + 5$$

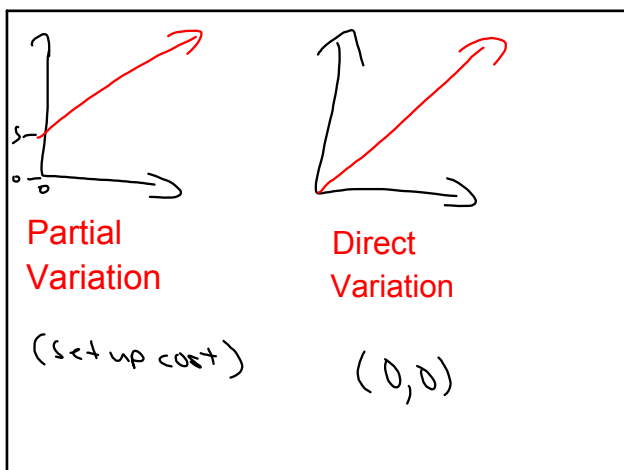
$$= 25$$

| x | y |
|----|----|
| 0 | 5 |
| 5 | 15 |
| 10 | 25 |
| 15 | 35 |
| 20 | 45 |
| 25 | 55 |
| 30 | 65 |

Feb 15-1:24 PM



Feb 15-9:14 AM



Feb 15-1:43 PM

please complete p. 115 - 117 q. 1,2, 4-6 a), c), 10 & 11

Dep Ind

Cost Time

a) $\text{Cost} = 5(\text{time}) + 5$
 $y = 5x + 5$

b) $\text{Cost} = 10(\text{time})$
 $y = 10x$

c) # Baskets Time
 $\# \text{ Baskets} = 20(\text{hours})$
 $y = 20x$

Feb 14-8:17 AM

Rate Triangle

| | |
|-----------------------------|-----------------|
| $\frac{\Delta y}{\Delta x}$ | $\frac{20}{10}$ |
| | $= 2$ |

| | |
|-----|-----|
| x | y |
| 0 | 0 |
| 10 | 20 |
| 20 | 40 |
| 30 | 60 |
| 40 | 80 |
| 50 | 100 |

Sep 27-9:09 AM